

Michael O. Leavitt Governor Dianne R. Nielson, Ph.D. Executive Director Don A. Ostler, P.E.



DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 West P.O. Box 144870 Salt Lake City, Utah 84114-4870 (801) 538-6146 (801) 538-6016 Fax (801) 536-4414 T.D.D. www.deq.state.ut.us Web

April 27, 1998

David J. Cline Manager, Water Resources Kennecott Utah Copper Corporation P.O. Box 6001 Magna, Utah 84044-6001

Dear Mr. Cline:

Subject:

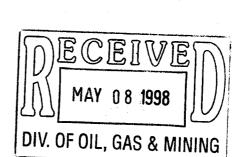
Kennecott Low pH Plume Treatment

We have reviewed the Kennecott Utah Copper Corporation March 18, 1998 letter and the September 19, 1997 consultant report by Shepherd Miller, Inc. These provide information on the treatment provided for the low pH ground water when it is mixed with the tailings from the Copperton Concentrator and settled in the tailings impoundment. The report indicates that a tailings/low pH water ratio of 40:1 would result in a pH of approximately 7 standard units and 99% removal of aluminum, copper, iron and zinc. The proposed mixing would also reduce the neutralizing potential of the tailings from approximately 17 to 15 tons CaCo₃/ktons.

Therefore, in accordance with the requirements of Part I, Section E of Groundwater Discharge Permit UGW350011 for the Kennecott Tailings Impoundment and UPDES Permit No. UT0000051, your proposal to treat 500 gpm of low pH ground water by mixing it with the Copperton Concentrator tailings at a ratio of 80:1 is hereby approved provided:

- 1. Kennecott complies with all of its UPDES permit limitations.
- 2. The tailings clarification canal is monitored monthly as proposed in the March 18, 1998 letter.

The data should be submitted monthly along with the UPDES permit discharge monitoring reports.



m/035/00Z

Water Quality Board

Leroy H. Wullstein, Ph.D. Chainnan
Lynn F. Pett
Vice Chairman
Robert G. Adams
R. Rex Ausburn, P.E.
Nan Bunker
Leonard Ferguson
Dianne R. Nielson, Ph.D.

K.C. Shaw, P.E. Ronald C. Sims, Ph.D. J. Ann Wechsler William R. Williams

> Don A. Ostler, P.E. Executive Secretary

David J. Cline April 27, 1998 Page 2

If you have any questions regarding this letter, please contact Steven McNeal at 538-6075.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E. Executive Secretary

DAO:SRM:ja

cc: Terry Sadler, SLC/County Health Dept.

Wayne Hedberg, Division of Oil, Gas & Mining

Curt McCormick, EPA Region VIII

P:\WQ\PERMITS\SMCNEAL\WP\KUC-PH-T.LTR FILE:KENNECOTT UPDES